

We claim:

## 1. A treatment plant, comprising:

a coarse screen receiving an inhomogeneous residue from a thermal waste disposal plant, said coarse screen separating the inhomogeneous residue into a coarse residue and a remaining residue;

an air separator disposed downstream of said coarse screen and receiving the remaining residue, said air separator having a zigzag-shaped duct with an upper outlet and a lower outlet and through which air is capable of flowing, said zigzag-shaped duct separating the remaining residue into a light residue flowing toward said upper outlet and a heavy residue flowing toward said lower outlet; and

an air separator drum connected to said lower outlet and through which the air can flow, said air separator drum having a longitudinal axis, an inner wall, and drivers disposed on said inner wall, said air separator drum mounted rotatably about said longitudinal axis.

2. The plant according to claim 1, including a centrifugal screen connected to said upper outlet, said centrifugal screen having a housing, a rotor disposed in said housing, and a screen disposed between said rotor and said housing.

3. The plant according to claim 2, wherein said centrifugal screen has battens fastened to said rotor.

4. The plant according to claim 2, wherein said centrifugal screen has a balling zone and a grinding zone, and said screen is disposed around said rotor in a region of said grinding zone.

5. The plant according claim 1, including a separating device for separating the heavy residue into an inert fraction and into at least one metal fraction, said separating device disposed downstream of said air separator drum.

6. The plant according to claim 1, wherein the thermal waste disposal plant is a pyrolysis plant.

7. The plant according claim 5, wherein the at least one metal fraction includes a ferrous fraction and a non-ferrous fraction.